

In The Specification:

Please amend the English translation of the specification as follows:

Page 1, after the title, insert the headers and paragraph as follows:

CROSS-REFERENCE TO RELATED APPLICATION

This is a United States National Phase Application of PCT Application No. EP2004/ 009068 application having an international filing date of 12 August 2004 which claims priority to German Application No. 103 37 455.8 filed 14 August 2003 and to German Patent Application No. 103 44 628.1 filed 25 September 2003 and to German Patent Application No. 103 51 650.6 filed 5 November 2003.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

N/A

REFERENCE TO A MICROFICHE APPENDIX

N/A

BACKGROUND OF THE INVENTION

Amend the subheading on Page 1 appearing under the title, as follows:

I. ~~Area of application~~ Field Of the Invention

Delete the subheading on Page 1, line 12 :

~~H. Technical Background~~

Amend the heading and subheading on Page 4, lines 10 and 12, as follows:

~~III. Depiction of the Invention a) Technical task~~

BRIEF SUMMARY OF THE INVENTION

On Page 4, delete the subheading appearing at line 19 as follows:

~~b) Resolution of the Task~~

Page 4, delete lines 21 and 22 as follows:

~~This task is resolved through features of claims 1 and 8. Advantageous embodiments result from the subsidiary claims.~~

Amend Page 6, line 17, as follows:

~~c) Exemplary embodiment~~

BRIEF DESCRIPTION OF THE DRAWINGS

Page 6, replace the paragraph beginning at line 22 as follows:

Figs. 1(a)-(c): A schematic diagram of the position sensor according to the invention,

Page 6, replace the paragraph beginning at line 25 as follows:

Figs. 3-6 (a)-(b): Additional designs of the flux guide unit.

Page 6, after line 25 add the following paragraphs and header:

Figs. 4(a)-(c): Additional designs of the flux guide unit,

Figs. 5(a)-(b): Additional designs of the flux guide unit,

Figs. 6(a)-(b): Additional designs of the flux guide unit.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENTS

Page 7, please amend the paragraph beginning at line 8 as follows:

For example, in its progression, the waveguide 3 is accommodated in a support tube 4, which for instance possesses a clearly ~~larger~~ larger interior diameter as the external diameter of the waveguide 3, and in which the waveguide 3 is coaxially positioned through the arrangement of a hose forming spacer 2 made of electrically non-conductive and non-magnetic material, more specifically a plastic material that is arranged coaxially around the waveguide 3 and with the support tube 4.

Page 8, please amend the paragraph beginning at line 16 as follows:

In opposition to the previously described variants, in which the flux guide unit 30 completely encloses the detector coil 5 and the waveguide 3 as far as possible, except for the passage openings for electrical connections, Fig. 3-5 in each case show solutions in side and frontal views, in which the flux guide unit consists of one or more C-shaped flux guide components 30a or ~~20b~~ 30b, which consequently do not completely enclose the detector coil 5.

Page 8, please amend the paragraph beginning at line 29 as follows:

According to Fig. 4, two such C-parts 30a are correspondingly arranged on sides of the waveguide 3, positioned in opposition to each other, so that the entire detector coil 5 lies within the flux guidance component 30, but is not completely enclosed tightly by it.

Page 9, please amend the paragraph beginning at line 14 as follows:

In the side view according to Fig. 4d, this solution is to be recognized that the detector coil 5 can be ~~would~~ wound up in the H-shaped coil base plate 1 in the side view of also in the cross-section, instead of the base plate free, self-supporting detector coils 5 represented in the other drawings.

Page 9, please amend the paragraph beginning at line 23 as follows:

In addition, Fig 1c shows a solution, in which the likewise coaxial detector coil 5 arranged on the waveguide 3 is not surrounded by a flux guide unit but rather by a coaxial, tubular, electrical return positioned around the detector coil 5. This effect especially occurs when its material is not only electrically conductive, but rather is also magnetically shielded and thus exhibits a permeability of $\mu > 1$, in particular $\mu > 10$, in particular $\mu > 1,000$, in particular, in particular $\mu > 10,000$. The flux guide unit is formed of ferromagnetic material.

Page 9 after the last line insert the following paragraph:

While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.